

CLAIMS

1. (amended) A filter plate having a body for filtering a fluid, wherein during the filtering a filter cake is deposited from the fluid on the filter plate for later removal, the body comprising:

a body having at least one flow path for fluid to be filtered, and a filter medium arrangement arranged in the at least one flow path and connected to the body, the filter medium arrangement being connected to the filter plate body by sintering, soldering, gluing or bonding.

an inlet side;

a chamber disposed at the inlet side, wherein the chamber is configured to accommodate a filter medium arrangement that comprises at least one filter medium layer, and wherein all of the filter medium layers are connected to each other and to the body by sintering;

at least one drainage channel disposed between the filter medium arrangement and a surface of the chamber; and

an outlet side, wherein the inlet side and the outlet side are connected by at least one fluid flow path across the filter medium arrangement, wherein filtered fluid drains through the drainage channel to the outlet side.

2. (original) The filter plate according to claim 1, wherein the filter medium arrangement comprises at least one filter medium layer formed by a filter fabric.

3. (original) The filter plate according to claim 2, wherein the filter medium arrangement comprises a laminar structure of a plurality of fabric layers of different fineness.

4. (original) The filter plate according to claim 3, wherein:

the filter plate has an inlet for fluid to be filtered; and

the fineness of the fabric layers of the laminar structure increases towards the filter plate inlet.

5. (original) The filter plate according to claim 3, wherein the laminar structure is additionally covered on the inlet side by a coarser fabric layer.

6. (original) The filter plate according to claim 3, wherein the terminal fabric layer on the inlet side is connected to a filter medium contact surface of the filter plate body.

7. (original) The filter plate according to claim 5, wherein the additional coarser fabric layer is connected to a filter medium contact surface on the filter plate body.

8. (original) The filter plate according to claim 3, wherein at least one of the fabric layers is made of metal fabric.

9. (original) The filter plate according to claim 1, wherein the filter medium arrangement comprises at least one filter medium layer made of porous sintered material.

10. (original) The filter plate according to claim 9, wherein the at last one filter medium layer is made of sintered metal or sintered ceramic.

11. (original) The filter plate according to claim 9, wherein the filter medium arrangement comprises a laminar structure of a plurality of layers of sintered material of different fineness.

12. (original) The filter plate according to claim 11, wherein the fineness of the layers of sintered material in the laminar structure increases in the direction of the filter plate inlet.

13. (amended) A method for producing a filter plate according to claim 1, comprising the step of connecting the filter medium arrangement to the filter plate body by sintering, ~~soldering, gluing or bonding.~~

14. (original) The method according to claim 13, wherein the filter medium arrangement comprises at least one of a filter fabric layer and a layer of sintered material, and wherein the method further comprises the step of subjecting the filter plate body and/or the filter fabric layer and/or the layer of sintered material to a surface treatment prior to connection thereof.

15. (original) The method according to claim 14, wherein said surface treatment step comprises electropolishing.

16. (original) The method according to claim 14, wherein said surface treatment step comprises the provision of a dirt-repellant surface coating.

17. (original) The method according to claim 13, wherein the method further comprises the step of subjecting the inlet-side surface of the filter medium arrangement to finish-dressing and/or finish-grinding after connection of the filter plate body and the filter medium arrangement.

18. (original) A method of using at least one filter plate according to claim 1, comprising the step of incorporating said filter plate into a rotary filter for fine filter media to separate fine solids from suspensions by pressure filtration, vacuum filtration, or combined vacuum-pressure filtration.